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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/922,776	08/07/2001	Tetsuji Togawa	2001-1103	2271

7590 02/25/2005
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Washington, DC 20006

EXAMINER

ROSE, ROBERT A

ART UNIT	PAPER NUMBER
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3723

DATE MAILED: 02/25/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/922,776

Applicant(s)

TOGAWA ET AL.

Examiner

Robert Rose

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 November 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14,16,17,19,20,43-46,50 and 51 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-14,16,17,19,20 and 43-46 is/are allowed.
- 6) ☒ Claim(s) 50 and 51 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Claims 15, 18, 21-42, and 47-49 have been canceled.
2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 50-51 are rejected under 35 U.S.C. 103(a) as being unpatentable over Okumura et al in view of Oishi et al. Okumura et al disclose an apparatus for polishing a wafer comprising all of the subject matter set forth in applicant's claims above except for the limitation of the cleaning unit being capable of scrubbing both sides of the wafer. A wafer is picked up from a loading station(11) to a wafer loading position(13-1)(14-1) by a transfer system in the form of either a single dual-arm robot(10), or pair of robots(10A)(10B) as shown in fig. 11. The wafer is then picked up by a top ring of a polishing arm(13-2)(14-2) and applied to a polishing unit(13-4)(14-4). After polishing, the wafer is delivered to a cleaning device having a primary cleaning station(16-7) and secondary cleaning station(15-9), where the wafer is rinsed. The wafer is then delivered by the transfer system to a storage cassette. Alternatively, the rinsed wafer may be delivered to a second polishing unit. Note plural cleaning units shown in figures 2A and 5 with an associated turnover device for inverting the wafer. The cleaning unit(15) in figure 11 is deemed to meet the broad limitation of being disposed between

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the polishing unit(14) and the load/unload unit(11)(12), with the transfer device located in the space between the polishing unit and load/unload unit. Oishi et al discloses a wafer polishing and cleaning apparatus having a cleaning unit(12) which scrubs both sides of a wafer in the presence of a cleaning fluid. To provide brushes or other means for scrubbing both sides of the wafer in the apparatus of Okamura et al to insure that the maximum number of particles adhering to the wafer faces is removed would have been obvious in view of Oishi et al.

4. Claims 1-14, 16-17, 19-20, and 43-46 are allowed.

5. Applicant's arguments filed November 8, 2004 have been fully considered but they are not persuasive. With regard to rejected claims 50-51, while Okamura et al do not mention any means for scrubbing the wafer on both sides of the wafer in the cleaning unit, such structure is disclosed at least in Oishi et al for use after a polishing step, in order to remove the maximum number of particles from both surfaces. Oishi employs brushes to perform the scrubbing step in the presence of a cleaning liquid. To simply provide scrubbing brushes or other well known scrubbing means in the cleaning unit of Okamura et al for this reason is amply suggested by the art of record.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within


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TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

6. Any inquiry concerning this communication should be directed to Robert Rose at telephone number (703) 308-1360.

rr

February 18, 2005.


ROBERT A. ROSE
PRIMARY EXAMINER
ART UNIT 323